

Commonwealth of Virginia Department of Mines, Minerals, and Energy Division of Gas and Oil

P.O. Box 1416; Abingdon, VA 24212

Telephone: (276) 676-5423

Tracking Number:	86
Company:	CNX Gas Company LLC
File Number:	BU-3118
Operations Name:	CBM E27 W/PL
Operation Type:	Coalbed/Pipeline

Drilling Report Type: Original

DRILLING REPORT (DGO-GO-14)

1. Drilling Data						
Date drilling commenced:	6/21/2006	_ D	rilling Contractor:	NOAH HO	ORN WELL G	
Date drilling completed:	6/25/2006	_	Rig Type:	✓ Rotary	☐ Cable Tool	
Driller's Total Depth (feet):	2,515	_	3 71	_ ,		
Log Total Depth (feet):	2,523	Co	oal Seam At Total D	epth Poc	ahontas	
2. Final Location Plat (as red	uired by 4 VAC2	5-150	-360.C.)			
•	•		•	V: 005 40	7	
Permitted State Plane X 99	0,483	FII	nal Plat State Plane	995,48	<u>/</u>	
Permitted State Plane Y: <u>358,528</u> Final Plat State Plane Y: <u>358,532</u>						
☐ Plat Previously Submitted	Or					
List of Attached Items:						
Descrip	tion			FileName)	
E27	7		E27 WELL L	OCATION	PLAT(FINAL).pdf	
3. Geological Data						
Fresh Water At:						
Depth	(in feet)		Rate	Unit	of Measure	
Salt Water At:						
Depth	(in feet)		Rate	Unit	of Measure	
	2,005		DAMP			

Form DGO-GO-14-E

Rev. 1/2007

Coal Seams

List of Attached Items:

Description	FileName		
E27	E27 COAL SEAMS-EXHIBIT A.pdf		

Gas and Oil Shows

List of Attached Items:

Description	FileName		
E27	E27 FORMATION TABLE(GAS SHOW).jpg		

4. Electric Logs (As required by 4VAC25-150-280.A.)

List all logs run: CALIPER, GAMMA, DENSITY, TEMP, DEVIATION

Did logs disclose vertical locations of a coal seam? ✓ Yes □ No

5. Survey Results (As required by 4VAC25-150-280.B.2)

List of Attached Items:

Description	FileName			
E27	E27 PLAN VIEW-DEVIATION LOG.pdf			

6. Casing and Tubing Program

List of Attached Items:

Description	FileName		
E27	E27 CASING.jpg		

7. Remarks

Use this space to note any conditions or occurrences, such as lost circulation, fishing jobs, junk left in hole, sidetracks, squeeze jobs, etc., not shown above. Include data and depth of condition/occurence.

7" CASING CEMENTED TO SURFACE ON THE ANNULUS.

8. Drillers Log

Compiled By: LESLIE ARRINGTON

List of Attached Items:

Description	FileName			
E27	E27 DRILL DATA.pdf			

9. Comments

HARDCOPY PREVIOUSLY APPROVED BY INSPECTOR

10. Signature

Permitee: CNX Gas Company LLC Date: 12/12/2006 (Company)

Signed By: LESLIE ARRINGTON Title: MANAGER (Signature)

INTERNAL USE ONLY

Submit Date: 12/12/2006

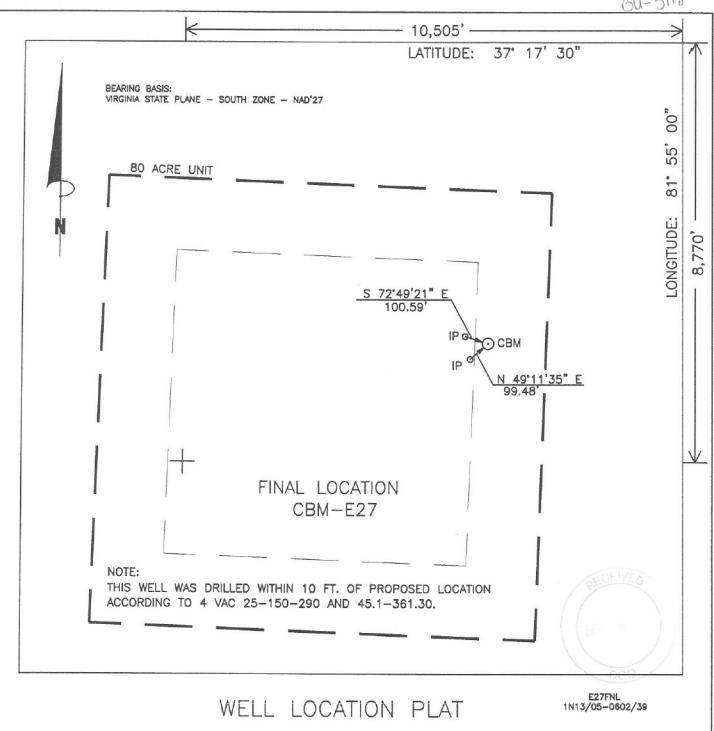
Status: Inspr Approved Date: 12/15/2006

Final PDF Date: 1/10/2007

Form DGO-GO-14-E

Page 3 of 3

Rev. 1/2007



COMPANYCNX_GAS_COMPANY, LLC WELL_NAME_OR_NUMBERCBM_E27 TRACT_NUMBERC L_RITTER_LUMBER_CO QUADRANGLEPATERSON DISTRICT:GARDEN	
WELL COORDINATES (VIRGINIA STATE PLANE): STATE PLANE : N 358,531.85 E 995,486.76 ELEVATION: 2364.63' METHOD USED TO DETERMINE ELEVATION: BY TRIG. LEVELS FROM CONSOL INC BM'S COUNTY BUCHANAN Scale: 1" = 400' Date 07-11-06 THIS PLAT IS A NEW PLAT; AN UPDATED PLAT; OR A FINAL LOCATION PLAT OF X	
Denotes the location of a well on United States Topographic Maps, scale 1 to 24,000, latitude and longitude lines being represented by border lines as shown (optional). D. R. PRICE	明 こうしいかから
Licensed Professional Engineer or Licensed Land Surveyor (Affix Seal)	子り

Exhibit A

Well Name: 06-CNX-E-27

SURFACE ELEV: 2364.63 EASTING: 995486.76 NORTHING: 358531.85

SEAM	DEPTH FROM (FT)	DEPTH TO (FT)	LEVATION TOSE)	THK. (FT)	REMARKS
	1.00	130.80	 2363.63	129.80	
DR	130.80	131.30	2233.83	0.50	
	131.30	170.20	2233.33	38.90	
NR2	170.20	171.00	2194.43	0.80	
	171.00	182.70	2193.63	11.70	
HG1	182.70	183.40	2181.93	0.70	
	183.40	298.10	2181.23	114.70	
SD1	298.10	298.40	2066.53	0.30	
	298.40	318.10	2066.23	19.70	
SD2	318.10	319.00	2046.53	0.90	
	319.00	320.20	2045.63	1.20	
COAL	320.20	321.70	2044.43	1.50	
	321.70	351.30	2042.93	29.60	
UB1	351.30	352.70	2013.33	1.40	
	352.70	456.90	2011.93	104.20	
LB1	456.90	458.70	1907.73	1.80	MINED OUT
	458.70	625.90	1905.93	167.20	
KN1	625.90	627.00	1738.73	1.10	
	627.00	632.00	1737.63	5.00	
KN2	632.00	632.60	1732.63	0.60	
	632.60	889.80	1732.03	257.20	
RA3	889.80	890.00	1474.83	0.20	
	890.00	1015.90	1474.63	125.90	
JB3	1015.90	1017.90	1348.73	2.00	
	1017.90	1030.50	1346.73	12.60	
COAL	1030.50	1030.70	1334.13	0.20	
	1030.70	1032.40	1333.93	1.70	
T2	1032.40	1032.70	1332.23	0.30	
	1032.70	1048.00	1331.93	15.30	
T1	1048.00	1048.50	1316.63	0.50	
	1048.50	1060.80	1316.13	12.30	
TI	1060.80	1061.10	1303.83	0.30	
	1061.10	1324.00	1303.53	262.90	
*GC2	1324.00	1324.90	1040.63	0.90	
	1324.90	1399.00	1039.73	74.10	
*SE2	1399.00	1399.90	965.63	0.90	
	1399.90	1434.80	964.73	34.90	
*LS1	1434.80	1435.90	929.83	1.10	
	1435.90	1506.60	928.73	70.70	
*UH1	1506.60	1507.70	858.03	1.10	
	1507.70	1540.20	856.93	32.50	
*UH2	1540.20	1540.40	824.43	0.20	
	1540.40	1732.70	824.23	192.30	
*P11	1732.70	1737.40	631.93	4.70	
+501	1737.40	1838.00	627.23	100.60	
*P91	1838.00	1838.40	526.63	0.40	
+000	1838.40	1841.40	526.23	3.00	
*P92	1841.40	1842.30	523.23	0.90	
+0077	1842.30	1843.60	522.33 521.03	0.20	
*COAL	1843.60	1843.80			
+D01	1843.80	1890.60	520.83 474.03	46.80 0.40	
*P81	1890.60	1891.00	474.03	197.70	
*P51	1891.00	2088.70 2091.00	275.93	2.30	
P31	2088.70	2091.00	413.33	2.50	

	2091.00	2213.84	273.63	122.84
*P3	2213.84	2214.61	150.79	0.77
	2214.61	2215.08	150.02	0.47
*P3	2215.08	2216.92	149.55	1.84
	2216.92	2319.80	147.71	102.88
*P01	2319.80	2319.90	44.83	0.10
	2319.90	2377.70	44.73	57.80
*SJ2	2377.70	2377.90	-13.07	0.20
	2377.90	2447.00	-13.27	69.10
*COAL	2447.00	2447.20	-82.37	0.20
	2447.20	2523.26	-82.57	76.06

NOTE: FOOTAGE NOT ADJUSTED FOR DEVIATION

COAL SEAMS TO BE STIMULATED WERE ADJUSTED DUE TO THE GAS

WELL'S PROXIMITY TO DISMAL CREEK. GAMMA-CALIPER LOG FROM 0 TO 530.00 GAMMA-DENSITY LOG FROM 530.00 TO TD.

FILE: C:\VP\APPS\E27.CMP

DATE: 07/19/06

FORMATION	TOP	ВОТТОМ	THICKNESS	IPF (MCFD/BOPD)	PRESSURE	HOURS TESTED
Lee/Norton	1435	1737	302	Not Taken		
Pocahontas	2089	2217	128	Not Taken		

PLAN VIEW COMPU-LOG DEVIATION

CLIENT: Consol Energy LOCATION: HOLE ID: 06-CHX-E-27 DATE OF LOG: 06/24/06 PROBE: 9136CA 955

MAG DECL: -6.9

SCALE: 5 FT/IN TRUE DEPTH: 2512.54 FT AZINUTH: 129.8

DISTANCE: 11.9 FT + = 300 FT INCR = = BOTTOM OF HOLE

N 15.08T

S COMPU-LOG - VERTICAL DEVIATION * Ж -jĸ *

06-CNX-E-27 06/24/06 9136CA DATE OF LOG: HOLE ID. PROBE Consol Energy FIELD OFFICE : Vansant, Va DATA FROM CLIENT

955

MAG. DECL. : -6.900 LOG: 06-CNX-E-27_06-24-06_16-40_9136CA_.02_-0.02_2512.95_DEVI.log

CASING AND TUBING PROGRAM

				Cement	Cem	ented		Packers Or
		Casing	Hole	Used In	To St	urface	Date	Bridge Plugs
	Casing	Interval	Size	Cu/Ft	Yes	No	Cemented	Kind/Size/Set
Conductor	13 3/8"	27.75	15"			X	6-21-06	
Surface	7"	530.65	8 7/8"	147.5 Cu/ſt		X	6-22-06	Basket@398'
Water Protection	4 1/2"	2278.21'	6 1/2"	366 Cu/ft	X	П	6-24-06	
Coal Protection	4 1/2"	2278.21'	6 1/2"	366 Cu/ft	X		6-24-06	
Other Casing And Tubing Left In Well								
Liners								

DRILL DATA HOLE-NOAH HORN WELL DRILLING, INC

COMPANY: CNX

HOLE #: E-27

LOCATION:

DRILL RIG #: 17

DATE STARTED: 06-21-06

DATED COMPLETED: 06-25-06

ELECTRIC LOGGED:YES

GROUTED:YES

DEPTH	THICKNE	CSS	STRATA REMARKS
FROM	TO	FT	DESCRIPTION, VOIDS ETC
0	27.75	27.75	OVERBURDEN/SANDY SHALE
27.75	60	32.25	SANDY SHALE
60	90	30	SANDY SHALE/SAND
90	120	30	SAND/SANDY SHALE/SAND
120	150	30	SAND/COAL/SANDY SHALE
150	180	30	SANDY SHALE/COAL/SANDY SHALE
180	210	30	SANDY SHALE/COAL/SAND
210	240	30	SAND/SANDY SHALE
240	270	30	SANDY SHALE
270	300	30	SANDY SHALE/COAL/SAND
300	330	30	SAND/COAL/SANDY SHALE
330	360	30	SANDY SHALE/SAND
360	390	30	SAND/SANDY SHALE
390	420	30	SANDY SHALE
420	450	30	SANDY SHALE/SAND
450	480	30	SANDY SHALE/SAND/VOID AT 457-462
480	510	30	SANDY SHALE/COAL/SAND
510	540	30	SAND
540	555	15	SAND/SANDY SHALE
555	565	10	SANDY SHALE
565	595	30	SANDY SHALE/SAND
595	625	30	SAND/SANDY SHALE
625	655	30	SANDY SHALE/COAL/SAND
655	685	30	SAND/SANDY SHALE/COAL/SANDY SHALE
685	715	30	SANDY SHALE/SAND
715	775	60	SAND
775	805	30	SAND/SANDY SHALE
805	835	30	SANDY SHALE/COAL/SAND
835	865	30	SAND/SANDY SHALE
865	895	30	SANDY SHALE
895	925	30	SANDY SHALE/SAND
925	955	30	SAND/SANDY SHALE
955	985	30	SAND/SANDY SHALE
985	1015	30	SANDY SHALE/SAND/COAL
1015	1015	30	SANDY SHALE/COAL/SAND
1015	1075	30	SAND/SANDY SHALE/SAND
1045	1105	30	SAND/SANDY SHALE
11075	1135	30	SANDY SHALE
1135	1165	30	SANDY SHALE/SAND
1165	1195	30	SAND STONE
	1225	30	SAND/SANDY SHALE/SAND
1195			
225	1255	30	SAND/SANDY SHALE

1255	1315	60	SANDY SHALE/SAND/SANDY SHALE
1315	1345	30	SANDY SHALE
1345	1375	30	SANDY SHALE/COAL/SAND
1375	1405	30	SAND/COAL/SANDY SHALE
1405	1435	30	SANDY SHALE/SAND
1435	1465	30	SAND/SANDY SHALE
1465	1495	30	SANDY SHALE/COAL/SAND
1495	1525	30	SAND/SANDY SHALE
1525	1555	30	SANDY SHALE/SAND/SANDY SHALE
1555	1585	30	SANDY SHALE/SAND
1585	1615	30	SAND STONE
1615	1645	30	SAND/SANDY SHALE
1645	1675	30	SANDY SHALE/SAND
1675	1705	30	SAND/COAL/SANDY SHALE
1705	1735	30	SANDY SHALE/COAL/SANDY SHALE
1735	1765	30	SANDY SHALE
1765	1795	30	SANDY SHALE/SAND
1795	1825	30	SAND/SANDY SHALE/SAND
1825	1855	30	SAND/SANDY SHALE
1855	1885	30	SANDY SHALE/SAND/SANDY SHALE
1885	1915	30	SANDY SHALE/COAL/SAND
1915	1945	30	SAND
1945	1975	30	SAND/SANDY SHALE/SAND
1975	2065	90	SAND
2065	2095	30	SAND/SANDY SHALE/COAL/SANDY SHALE
2095	2125	30	SANDY SHALE/SAND
2125	2155	30	SAND/SANDY SHALE/SAND
2155	2185	30	SAND/SANDY SHALE
2185	2215	30	SANDY SHALE
2215	2225	10	SANDY SHALE
2225	2229	4	P-3 SEAM
2229	2275	46	SAND
2275	2305	30	SAND/SANDY SHALE
2305	2335	30	SANDY SHALE/SAND
2335	2365	30	SAND/SANDY SHALE
2365	2395	30	SANDY SHALE/SAND
2395	2425	30	SAND/SANDY SHALE/SAND
2425	2455	30	SANDY SHALE/SAND
2455	2485	30	SAND/SANDY SHALE/SAND
2485	2515	30	SAND/SANDY SHALE

2515.00 FT. TOTAL DEPTH 27.75 FT. OF 13 3/8" CASING 530.65 FT. OF 7" CASING 2278.21 FT. OF 4 ½" CASING